

REMARKS

Applicants have considered the outstanding official action. It is respectfully submitted that the claims are directed to patentable subject matter as set forth below.

Initially, it is noted that PTO Form-892 as attached to the official action mailed February 27, 2004 is incomplete. U.S. Patent No. 5,380,564 (VanKuiken) and U.S. Patent No. 5,750,190 (Kondrats) as applied by the Examiner are not listed on PTO Form-892. Further, U.S. Patent No. 5,833,516 (De Haas) is listed twice. Correction of the record is respectfully requested.

Applicants are submitting a Form-1449 listing a reference (Japanese Appln. No. 4-284363 A and an English abstract therefor) cited in a corresponding foreign case. Consideration of the reference is respectfully requested.

Applicants thank the Examiner for PTO Form-1449 filed July 31, 2002 as initialed. Applicants note that another Information Disclosure Statement (IDS) was mailed on February 11, 2002 and received in the Patent Office on February 26, 2002. A copy of the PTO date-stamped postcard therefor is attached. The PTO Form-1449 filed with the IDS is also attached. Return of this PTO Form-1449 initialed by the Examiner is requested.

The outstanding rejections are as follows:

(1) Claims 1, 6-8, 10-11, 14-15 and 19-22 under 35 U.S.C. §102(b) over U.S. Patent No. 5,833,516 (De Haas);

(2) Claims 2-5, 13 and 17-18 under 35 U.S.C. §103(a) over De Haas as applied above and further in view of U.S. Patent No. 4,339,322 (Balko) or, alternatively, Balko in view of De Haas;

(3) Claim 9 under 35 U.S.C. §102(b) over De Haas in view of U.S. Patent No. 5,380,564 (VanKuiken);

(4) Claim 12 under 35 U.S.C. §102(b) over De Haas in view of U.S. Patent No. 5,738,574 (Tolles); and

(5) Claim 16 under 35 U.S.C. §102(b) over De Haas in view of U.S. Patent No. 5,750,190 (Kondrats).

At the time of the official action claims 1 and 22 were the only independent claims.

The claims have been amended. Claim 1 has been rewritten as claim 23. Claims 6-8 have been canceled and the subject matter thereof included in claim 23. Claim 23 also provides that the claimed method is for manufacturing flow field plates used in fuel cells, electrolyzers and batteries. Support is present in the specification at page 1, lines 1-2. Claim 22 is now dependent on claim 23. Claim 9 has been canceled. The remaining dependent claims were amended as to dependency and form in view of new independent claim 23.

Applicants note that the claims as now pending are based on the claims of the corresponding European application which has now been granted as EP 1 196 958 B1 (a copy is attached for the convenience of the Examiner).

As to the rejections, the primary reference De Haas is directed to plates of electrically insulating material for use as control or spacers, or electron transport duct plates in electronic displays. The transport plates of De Haas would not be suitable for use in fuel cells, electrolyzers and batteries as in the presently claimed invention. Further, the process described in De Haas teaches the use of water jet blasting only which is not encompassed by the pending claims. As to claim 22, De Haas provides no teaching as to flow field plates. Moreover, as would be understood by one skilled in the art, different mechanisms of material removal do result in different surface morphologies as revealed upon microscopic examination (see the Hashish reference cited during the International examination).

Accordingly, De Haas does not teach each and every element of the claimed invention and, thus, does not anticipate the claimed invention within the meaning of 35 U.S.C. §102. Withdrawal of the §102 rejection is respectfully requested.

As to the remaining rejections of the dependent claims, applicants submit that De Haas does not teach or suggest modification to provide the claimed invention as set forth above. Further, the secondary references do not provide for the shortcomings of De Haas.

More particularly, Balko describes plates prepared by pressure molding. Balko does not teach or suggest blasting methods as claimed. One skilled in the art looking to provide a rapid, low-cost process for the manufacture of flow field plates from desirable materials would not arrive at the claimed methods based on De Haas and Balko.

VanKuiken is directed to water etching. Water etching is not encompassed by the pending claims.

Tolles describes a mechanical polishing system with no disclosure of applicability to flow field plates.

Kondrats describes vinyl polymer masks used as protective coatings during mechanical processing operations of vehicles or buildings.

Thus, as to claims 2-5, 13 and 17-18, the combination of De Haas and Balko does not teach or suggest the claimed invention. As to claims 9, 12 and 16, the combinations of De Haas/VanKuiken, De Haas/Tolles and De Haas/Kondrats, respectively, do not teach each and every claimed element and, thus, do not anticipate the claimed invention within the

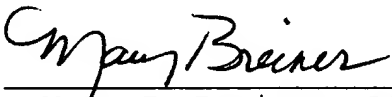
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meaning of 35 U.S.C. §102. Withdrawal of the §102 and §103 rejections based on the applied combinations of primary and secondary references is respectfully requested.

Reconsideration and allowance of the application are respectfully urged.

Respectfully submitted,

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Attachments - PTO Form-1449 and 2 Documents
- 02-11-02 PTO Date-Stamped Postcard
- PTO Form-1449 filed 02-11-02
- EP 1 196 958 B1